

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0130      **USGS Hydrologic Unit:** 051202020605  
**Stream Name:** Black Creek      **County:** Knox  
**Description:** Unnamed Farm Lane      **Latitude:** 38 49 27.98932      **Longitude:** -87 13 12.54905  
**Drainage:** 132.32      **Site Number:** 22T-001

**SiteID:** WWL-06-0130      **Sample Date:** 5/12/2022      **IDEM Sample #:** AB51179  
**Water Flow Type** Glide      **Water Appearance** Brown      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	63.8 %		ASTM D888-09(C)
DO	5.54 mg/L		ASTM D888-09(C)
pH (Field)	7.35 SU		EPA 150.2
Specific Conductance (Field)	770 umho/cm		SM2510B
Temperature	22.2 °C		SM2550B(2)
Turbidity (Hach)	28 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 50316481017	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	193 mg/L	2	SM2320B
Chloride	13.3 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	362 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	34.4 mg/L	5	SM2540D
Solids, Total (TS)	569 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	508 mg/L	10	SM2540C
Sulfate	217 mg/L	2.5	EPA 300.0
Calcium (Total)	88100 ug/L	1000	EPA 200.7
Magnesium (Total)	34500 ug/L	1000	EPA 200.7
COD	13.7 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.96 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.11 mg/L	0.05	EPA 365.1
TKN	0.52 mg/L	0.5	EPA 351.2
TOC	3.3 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51179	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	365.4 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0130

Sample Date: 6/15/2022

IDEM Sample #: AB51341

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	71.6 %		ASTM D888-09(C)
DO	5.94 mg/L		ASTM D888-09(C)
pH (Field)	7.63 SU		EPA 150.2
Specific Conductance (Field)	852 umho/cm		SM2510B
Temperature	24.6 °C		SM2550B(2)
Turbidity (Hach)	27 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 50319032017	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	195 mg/L	2	SM2320B
Chloride	13.6 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	374 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	48 mg/L	5	SM2540D
Solids, Total (TS)	610 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	555 mg/L	10	SM2540C
Sulfate	238 mg/L	25	EPA 300.0
Calcium (Total)	90800 ug/L	1000	EPA 200.7
Magnesium (Total)	35800 ug/L	1000	EPA 200.7
COD	12.8 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.97 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.12 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	3.1 mg/L	1	SM5310C

Lab ID #: AB51341	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	816.4 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
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Surface Water Results Summary**

SiteID: WWL-06-0130

Sample Date: 7/27/2022

IDEM Sample #: AB52085

Water Flow Type Run

Water Appearance Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	64.6 %		ASTM D888-09(C)
DO	5.49 mg/L		ASTM D888-09(C)
pH (Field)	7.56 SU		EPA 150.2
Specific Conductance (Field)	419.4 umho/cm		SM2510B
Temperature	23.5 °C		SM2550B(2)
Turbidity (Hach)	83.7 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121017	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	72.7 mg/L	10	SM2320B
Chloride	5.4 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	138 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	90.5 mg/L	6.2	SM2540D
Solids, Total (TS)	371 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	259 mg/L	10	SM2540C
Sulfate	120 mg/L	2.5	EPA 300.0
Calcium (Total)	33100 ug/L	1000	EPA 200.7
Magnesium (Total)	13500 ug/L	1000	EPA 200.7
COD	16.5 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.76 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.29 mg/L	0.05	EPA 365.1
TKN	0.99 mg/L	0.5	EPA 351.2
TOC	7.2 mg/L	1	SM5310C

Lab ID #: AB52085b	Result	Reporting Limit	Method
Coliforms (Total)	173290 MPN/100mL	100	SM9223B
E. coli	5540 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	1 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	2 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		3 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86

**Indiana Department of Environmental Management  
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Surface Water Results Summary**

**SiteID:** WWL-06-0131      **USGS Hydrologic Unit:** 051202020605  
**Stream Name:** Singer Ditch      **County:** Knox  
**Description:** Koening Road      **Latitude:** 38 50 23.61478      **Longitude:** -87 12 55.68726  
**Drainage:** 19.041      **Site Number:** 22T-002

**SiteID:** WWL-06-0131      **Sample Date:** 5/12/2022      **IDEM Sample #:** AB51180  
**Water Flow Type** Glide      **Water Appearance** Brown      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	65.1 %		ASTM D888-09(C)
DO	5.88 mg/L		ASTM D888-09(C)
pH (Field)	7.49 SU		EPA 150.2
Specific Conductance (Field)	949 umho/cm		SM2510B
Temperature	22.2 °C		SM2550B(2)
Turbidity (Hach)	15.7 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	0 Lookup		Observation

<u>Lab ID #:</u> 50316481018	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	202 mg/L	2	SM2320B
Chloride	14.5 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	483 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	14.1 mg/L	2.9	SM2540D
Solids, Total (TS)	710 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	685 mg/L	10	SM2540C
Sulfate	322 mg/L	25	EPA 300.0
Calcium (Total)	112000 ug/L	1000	EPA 200.7
Magnesium (Total)	49300 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.76 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	2.7 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51180	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	178.5 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
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Surface Water Results Summary**

SiteID: WWL-06-0131      Sample Date: 6/15/2022      IDEM Sample #: AB51342  
 Water Flow Type Riffle      Water Appearance Clear      Water Depth  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed % 0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	74.4 %		ASTM D888-09(C)
DO	6.22 mg/L		ASTM D888-09(C)
pH (Field)	7.52 SU		EPA 150.2
Specific Conductance (Field)	1012 umho/cm		SM2510B
Temperature	23.3 °C		SM2550B(2)
Turbidity (Hach)	11.4 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50319032018	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	191 mg/L	2	SM2320B
Chloride	12.6 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	497 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	11.1 mg/L	2.5	SM2540D
Solids, Total (TS)	771 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	695 mg/L	10	SM2540C
Sulfate	351 mg/L	25	EPA 300.0
Calcium (Total)	114000 ug/L	1000	EPA 200.7
Magnesium (Total)	51800 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.62 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	2.8 mg/L	1	SM5310C

Lab ID #: AB51342	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	191.8 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
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Surface Water Results Summary**

SiteID: WWL-06-0131

Sample Date: 7/27/2022

IDEM Sample #: AB52086

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	58.7 %		ASTM D888-09(C)
DO	4.98 mg/L		ASTM D888-09(C)
pH (Field)	7.39 SU		EPA 150.2
Specific Conductance (Field)	468.6 umho/cm		SM2510B
Temperature	23.6 °C		SM2550B(2)
Turbidity (Hach)	73.3 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50322121018	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	83.2 mg/L	10	SM2320B
Chloride	5.2 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	189 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	78.6 mg/L	5	SM2540D
Solids, Total (TS)	401 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	280 mg/L	10	SM2540C
Sulfate	133 mg/L	2.5	EPA 300.0
Calcium (Total)	43500 ug/L	1000	EPA 200.7
Magnesium (Total)	19400 ug/L	1000	EPA 200.7
COD	14.2 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.15 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.9 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.23 mg/L	0.05	EPA 365.1
TKN	1.1 mg/L	0.5	EPA 351.2
TOC	6.2 mg/L	1	SM5310C

Lab ID #: AB52086	Result	Reporting Limit	Method
E. coli	770.1 MPN/100mL	1	SM9223B

Lab ID #: AB52086b	Result	Reporting Limit	Method
Coliforms (Total)	129970 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86
			6 - Gale

**Indiana Department of Environmental Management  
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Surface Water Results Summary**

**SiteID:** WWL-06-0151      **USGS Hydrologic Unit:** 051202020605  
**Stream Name:** Hill Ditch      **County:** Knox  
**Description:** Grandview Drive      **Latitude:** 38 53 47.56348      **Longitude:** -87 11 58.81215  
**Drainage:** 5.417      **Site Number:** 22T-003

**SiteID:** WWL-06-0151      **Sample Date:** 5/12/2022      **IDEM Sample #:** AB51183  
**Water Flow Type** Glide      **Water Appearance** Murky      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<b>Lab ID #:</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
% Sat	49.2 %		ASTM D888-09(C)
DO	4.28 mg/L		ASTM D888-09(C)
pH (Field)	7.43 SU		EPA 150.2
Specific Conductance (Field)	638 umho/cm		SM2510B
Temperature	22.2 °C		SM2550B(2)
Turbidity (Hach)	14.2 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<b>Lab ID #: 50316481020</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Alkalinity (as CaCO3)	211 mg/L	2	SM2320B
Chloride	30.4 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	297 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	17 mg/L	2.5	SM2540D
Solids, Total (TS)	417 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	392 mg/L	10	SM2540C
Sulfate	82.3 mg/L	2.5	EPA 300.0
Calcium (Total)	71500 ug/L	1000	EPA 200.7
Magnesium (Total)	28900 ug/L	1000	EPA 200.7
COD	14.6 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.19 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.5 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	0.76 mg/L	0.5	EPA 351.2
TOC	3.3 mg/L	1	SM5310C

<b>Lab ID #: AB51183</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	160.7 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
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Surface Water Results Summary**

SiteID: WWL-06-0151      Sample Date: 6/15/2022      IDEM Sample #: AB51345  
 Water Flow Type: Glide      Water Appearance: Murky      Water Depth:  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed %: 0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	57.7 %		ASTM D888-09(C)
DO	4.65 mg/L		ASTM D888-09(C)
pH (Field)	7.5 SU		EPA 150.2
Specific Conductance (Field)	847 umho/cm		SM2510B
Temperature	26.3 °C		SM2550B(2)
Turbidity (Hach)	8.02 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50319032020	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	230 mg/L	2	SM2320B
Chloride	22.6 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	405 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	6.6 mg/L	2.5	SM2540D
Solids, Total (TS)	606 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	534 mg/L	10	SM2540C
Sulfate	184 mg/L	2.5	EPA 300.0
Calcium (Total)	92100 ug/L	1000	EPA 200.7
Magnesium (Total)	42400 ug/L	1000	EPA 200.7
COD	14.9 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.37 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	0.62 mg/L	0.5	EPA 351.2
TOC	3.5 mg/L	1	SM5310C

Lab ID #: AB51345	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	18.1 MPN/100mL	1	SM9223B



**Indiana Department of Environmental Management  
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Surface Water Results Summary**

SiteID: WWL-06-0151

Sample Date: 7/27/2022

IDEM Sample #: AB52089

Water Flow Type Eddy

Water Appearance Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments: Eddy present

Lab ID #:	Result	Reporting Limit	Method
% Sat	60.6 %		ASTM D888-09(C)
DO	5.22 mg/L		ASTM D888-09(C)
pH (Field)	7.11 SU		EPA 150.2
Specific Conductance (Field)	307.8 umho/cm		SM2510B
Temperature	22.7 °C		SM2550B(2)
Turbidity (Hach)	43.8 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50322121020	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	110 mg/L	10	SM2320B
Chloride	10.6 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	135 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	38.5 mg/L	3.1	SM2540D
Solids, Total (TS)	247 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	185 mg/L	10	SM2540C
Sulfate	22.1 mg/L	0.25	EPA 300.0
Calcium (Total)	36600 ug/L	1000	EPA 200.7
Magnesium (Total)	10600 ug/L	1000	EPA 200.7
COD	22.4 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.22 mg/L	0.05	EPA 365.1
TKN	1.2 mg/L	0.5	EPA 351.2
TOC	7.4 mg/L	1	SM5310C

Lab ID #: AB52089	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	770.1 MPN/100mL	1	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	1 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	2 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		3 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86
			6 - Gale

**Indiana Department of Environmental Management  
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Surface Water Results Summary**

**SiteID:** WWL-06-0133      **USGS Hydrologic Unit:** 051202020605  
**Stream Name:** Singer Ditch      **County:** Knox  
**Description:** County Line Road      **Latitude:** 38 54 28.23476      **Longitude:** -87 13 31.66845  
**Drainage:** 7.362      **Site Number:** 22T-004

**SiteID:** WWL-06-0133      **Sample Date:** 5/12/2022      **IDEM Sample #:** AB51181  
**Water Flow Type** Glide      **Water Appearance** Murky      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<b>Lab ID #:</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
% Sat	76 %		ASTM D888-09(C)
DO	6.5 mg/L		ASTM D888-09(C)
pH (Field)	7.64 SU		EPA 150.2
Specific Conductance (Field)	1374 umho/cm		SM2510B
Temperature	23 °C		SM2550B(2)
Turbidity (Hach)	7.4 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<b>Lab ID #: 50316481019</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Alkalinity (as CaCO3)	153 mg/L	2	SM2320B
Chloride	2.9 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	714 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	2.9 mg/L	2.5	SM2540D
Solids, Total (TS)	1150 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	1090 mg/L	20	SM2540C
Sulfate	676 mg/L	25	EPA 300.0
Calcium (Total)	151000 ug/L	1000	EPA 200.7
Magnesium (Total)	81700 ug/L	1000	EPA 200.7
COD	14 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.18 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.11 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	0.55 mg/L	0.5	EPA 351.2
TOC	3.8 mg/L	1	SM5310C

<b>Lab ID #: AB51181</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	151.5 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0133      Sample Date: 6/15/2022      IDEM Sample #: AB51343  
 Water Flow Type: Glide      Water Appearance: Clear      Water Depth:  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed %: 0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	77 %		ASTM D888-09(C)
DO	6.03 mg/L		ASTM D888-09(C)
pH (Field)	7.66 SU		EPA 150.2
Specific Conductance (Field)	1369 umho/cm		SM2510B
Temperature	28.1 °C		SM2550B(2)
Turbidity (Hach)	13.8 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50319032019	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	142 mg/L	2	SM2320B
Chloride	2.2 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	681 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	16.6 mg/L	2.5	SM2540D
Solids, Total (TS)	1080 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	1050 mg/L	10	SM2540C
Sulfate	626 mg/L	25	EPA 300.0
Calcium (Total)	141000 ug/L	1000	EPA 200.7
Magnesium (Total)	79500 ug/L	1000	EPA 200.7
COD	14.3 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.15 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.12 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	3.9 mg/L	1	SM5310C

Lab ID #: AB51343	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	613.1 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0133

Sample Date: 7/27/2022

IDEM Sample #: AB52087

Water Flow Type Run

Water Appearance Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	75.3 %		ASTM D888-09(C)
DO	6.22 mg/L		ASTM D888-09(C)
pH (Field)	7.55 SU		EPA 150.2
Specific Conductance (Field)	855 umho/cm		SM2510B
Temperature	24.9 °C		SM2550B(2)
Turbidity (Hach)	52.7 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50322121019	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	94.1 mg/L	10	SM2320B
Chloride	3.6 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	427 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	64.3 mg/L	4.2	SM2540D
Solids, Total (TS)	830 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	699 mg/L	10	SM2540C
Sulfate	417 mg/L	25	EPA 300.0
Calcium (Total)	88400 ug/L	1000	EPA 200.7
Magnesium (Total)	50000 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.24 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.26 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.17 mg/L	0.05	EPA 365.1
TKN	1 mg/L	0.5	EPA 351.2
TOC	5 mg/L	1	SM5310C

Lab ID #: AB52087	Result	Reporting Limit	Method
E. coli	816.4 MPN/100mL	1	SM9223B

Lab ID #: AB52087b	Result	Reporting Limit	Method
Coliforms (Total)	129970 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86
			6 - Gale

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0134      **USGS Hydrologic Unit:** 051202020605  
**Stream Name:** Black Creek      **County:** Knox  
**Description:** SR 58      **Latitude:** 38 52 38.70054      **Longitude:** -87 11 13.55031  
**Drainage:** 108.971      **Site Number:** 22T-005

**SiteID:** WWL-06-0134      **Sample Date:** 5/12/2022      **IDEM Sample #:** AB51184  
**Water Flow Type** Glide      **Water Appearance** Murky      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	67.9 %		ASTM D888-09(C)
DO	5.95 mg/L		ASTM D888-09(C)
pH (Field)	7.82 SU		EPA 150.2
Specific Conductance (Field)	792 umho/cm		SM2510B
Temperature	21.7 °C		SM2550B(2)
Turbidity (Hach)	43.7 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

<u>Lab ID #:</u> 50316481021	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	178 mg/L	2	SM2320B
Chloride	10.4 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	364 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	56.6 mg/L	5	SM2540D
Solids, Total (TS)	634 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	564 mg/L	10	SM2540C
Sulfate	246 mg/L	25	EPA 300.0
Calcium (Total)	86800 ug/L	1000	EPA 200.7
Magnesium (Total)	35900 ug/L	1000	EPA 200.7
COD	16.2 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.1 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.13 mg/L	0.05	EPA 365.1
TKN	0.63 mg/L	0.5	EPA 351.2
TOC	3.6 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51184	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	209.8 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0134      Sample Date: 6/15/2022      IDEM Sample #: AB51346  
 Water Flow Type    Glide      Water Appearance    Brown      Water Depth       Algae?  
 Water Flow (cf/sec):       Flow Estimated?       Aquatic Life?      Canopy Closed %    0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	68.5 %		ASTM D888-09(C)
DO	5.64 mg/L		ASTM D888-09(C)
pH (Field)	7.67 SU		EPA 150.2
Specific Conductance (Field)	887 umho/cm		SM2510B
Temperature	25.2 °C		SM2550B(2)
Turbidity (Hach)	66.2 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50319032021	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	196 mg/L	2	SM2320B
Chloride	11.3 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	391 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	63.2 mg/L	5	SM2540D
Solids, Total (TS)	652 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	569 mg/L	10	SM2540C
Sulfate	246 mg/L	25	EPA 300.0
Calcium (Total)	91800 ug/L	1000	EPA 200.7
Magnesium (Total)	39400 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.1 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.15 mg/L	0.05	EPA 365.1
TKN	0.6 mg/L	0.5	EPA 351.2
TOC	3.4 mg/L	1	SM5310C

Lab ID #: AB51346	Result	Reporting Limit	Method
E. coli	461.1 MPN/100mL	1	SM9223B

Lab ID #: AB51346b	Result	Reporting Limit	Method
Coliforms (Total)	16070 MPN/100mL	100	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0134

Sample Date: 7/27/2022

IDEM Sample #: AB52090

Water Flow Type Run

Water Appearance Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	61.1 %		ASTM D888-09(C)
DO	5.18 mg/L		ASTM D888-09(C)
pH (Field)	7.49 SU		EPA 150.2
Specific Conductance (Field)	410.2 umho/cm		SM2510B
Temperature	23.6 °C		SM2550B(2)
Turbidity (Hach)	121 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121021	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	74.7 mg/L	10	SM2320B
Chloride	5.7 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	146 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	85.6 mg/L	5.6	SM2540D
Solids, Total (TS)	392 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	262 mg/L	10	SM2540C
Sulfate	110 mg/L	2.5	EPA 300.0
Calcium (Total)	35200 ug/L	1000	EPA 200.7
Magnesium (Total)	14000 ug/L	1000	EPA 200.7
COD	15.2 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.14 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.78 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.22 mg/L	0.05	EPA 365.1
TKN	1.4 mg/L	0.5	EPA 351.2
TOC	6.6 mg/L	1	SM5310C

Lab ID #: AB52090b	Result	Reporting Limit	Method
Coliforms (Total)	241960 MPN/100mL	100	SM9223B
E. coli	4100 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	2 - Mod./Light	3 - 46-60
4 - Cloudy		3 - Moderate	4 - 61-75
5 - Mist		4 - Mod./Strong	5 - 76-85
6 - Fog		5 - Strong	6 - > 86
7 - Shower		6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0135      **USGS Hydrologic Unit:** 051202020604  
**Stream Name:** Black Creek      **County:** Knox  
**Description:** Jericho Road      **Latitude:** 38 53 43.77591      **Longitude:** -87 9 35.91845  
**Drainage:** 106.171      **Site Number:** 22T-006

**SiteID:** WWL-06-0135      **Sample Date:** 5/12/2022      **IDEM Sample #:** AB51185  
**Water Flow Type** Glide      **Water Appearance** Murky      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	72.5 %		ASTM D888-09(C)
DO	6.14 mg/L		ASTM D888-09(C)
pH (Field)	7.78 SU		EPA 150.2
Specific Conductance (Field)	828 umho/cm		SM2510B
Temperature	23.6 °C		SM2550B(2)
Turbidity (Hach)	40.8 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

<u>Lab ID #:</u> 50316481022	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	170 mg/L	2	SM2320B
Chloride	9.8 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	385 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	49 mg/L	5	SM2540D
Solids, Total (TS)	641 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	588 mg/L	10	SM2540C
Sulfate	272 mg/L	25	EPA 300.0
Calcium (Total)	90100 ug/L	1000	EPA 200.7
Magnesium (Total)	38900 ug/L	1000	EPA 200.7
COD	14.3 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.92 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.12 mg/L	0.05	EPA 365.1
TKN	0.71 mg/L	0.5	EPA 351.2
TOC	4 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51185	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	191.8 MPN/100mL	1	SM9223B



**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0135      Sample Date: 6/15/2022      IDEM Sample #: AB51347  
 Water Flow Type    Glide      Water Appearance    Brown      Water Depth       Algae?  
 Water Flow (cf/sec):       Flow Estimated?       Aquatic Life?      Canopy Closed %    0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	76.3 %		ASTM D888-09(C)
DO	6.01 mg/L		ASTM D888-09(C)
pH (Field)	7.62 SU		EPA 150.2
Specific Conductance (Field)	970 umho/cm		SM2510B
Temperature	27.5 °C		SM2550B(2)
Turbidity (Hach)	54.9 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50319032022	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	191 mg/L	2	SM2320B
Chloride	36 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	421 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	6 mg/L	2.5	SM2540D
Solids, Total (TS)	749 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	660 mg/L	10	SM2540C
Sulfate	45.4 mg/L	2.5	EPA 300.0
Calcium (Total)	95900 ug/L	1000	EPA 200.7
Magnesium (Total)	44000 ug/L	1000	EPA 200.7
COD	15.5 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.79 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.14 mg/L	0.05	EPA 365.1
TKN	0.81 mg/L	0.5	EPA 351.2
TOC	3.7 mg/L	1	SM5310C

Lab ID #: AB51347	Result	Reporting Limit	Method
E. coli	435.2 MPN/100mL	1	SM9223B

Lab ID #: AB51347b	Result	Reporting Limit	Method
Coliforms (Total)	12360 MPN/100mL	100	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0135

Sample Date: 7/27/2022

IDEM Sample #: AB52091

Water Flow Type Run

Water Appearance Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	63.4 %		ASTM D888-09(C)
DO	5.41 mg/L		ASTM D888-09(C)
pH (Field)	7.56 SU		EPA 150.2
Specific Conductance (Field)	324.8 umho/cm		SM2510B
Temperature	23.2 °C		SM2550B(2)
Turbidity (Hach)	182 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121022	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	63.2 mg/L	10	SM2320B
Chloride	4.8 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	104 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	245 mg/L	16.7	SM2540D
Solids, Total (TS)	427 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	214 mg/L	10	SM2540C
Sulfate	79.6 mg/L	2.5	EPA 300.0
Calcium (Total)	25200 ug/L	1000	EPA 200.7
Magnesium (Total)	9970 ug/L	1000	EPA 200.7
COD	16.6 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.23 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.64 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.31 mg/L	0.05	EPA 365.1
TKN	1.9 mg/L	0.5	EPA 351.2
TOC	6.4 mg/L	1	SM5310C

Lab ID #: AB52091b	Result	Reporting Limit	Method
Coliforms (Total)	> 241960 MPN/100mL	241960	SM9223B
E. coli	4880 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	2 - Mod./Light	3 - 46-60
4 - Cloudy		3 - Moderate	4 - 61-75
5 - Mist		4 - Mod./Strong	5 - 76-85
6 - Fog		5 - Strong	6 - > 86
7 - Shower		6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0136      **USGS Hydrologic Unit:** 051202020604  
**Stream Name:** Calico Slash Ditch      **County:** Greene  
**Description:** CR 700 South      **Latitude:** 38 55 21.12267      **Longitude:** -87 9 39.94821  
**Drainage:** 4.054      **Site Number:** 22T-007

**SiteID:** WWL-06-0136      **Sample Date:** 5/12/2022      **IDEM Sample #:** AB51186  
**Water Flow Type** Glide      **Water Appearance** Brown      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	21.8 %		ASTM D888-09(C)
DO	10.63 mg/L		ASTM D888-09(C)
pH (Field)	7.47 SU		EPA 150.2
Specific Conductance (Field)	617 umho/cm		SM2510B
Temperature	22 °C		SM2550B(2)
Turbidity (Hach)	21 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

<u>Lab ID #:</u> 50316481023	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	216 mg/L	2	SM2320B
Chloride	34.6 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	256 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	10.9 mg/L	2.5	SM2540D
Solids, Total (TS)	394 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	368 mg/L	10	SM2540C
Sulfate	50.1 mg/L	2.5	EPA 300.0
Calcium (Total)	61800 ug/L	1000	EPA 200.7
Magnesium (Total)	24800 ug/L	1000	EPA 200.7
COD	18.5 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.13 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	3.6 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	0.73 mg/L	0.5	EPA 351.2
TOC	3.4 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51186	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	275.5 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0136      Sample Date: 6/15/2022      IDEM Sample #: AB51348  
 Water Flow Type: Glide      Water Appearance: Clear      Water Depth:  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed %: 0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	55.6 %		ASTM D888-09(C)
DO	4.4 mg/L		ASTM D888-09(C)
pH (Field)	7.18 SU		EPA 150.2
Specific Conductance (Field)	647 umho/cm		SM2510B
Temperature	27.2 °C		SM2550B(2)
Turbidity (Hach)	7.91 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50319032023	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	228 mg/L	2	SM2320B
Chloride	11.3 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	247 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	60 mg/L	5	SM2540D
Solids, Total (TS)	373 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	357 mg/L	10	SM2540C
Sulfate	304 mg/L	25	EPA 300.0
Calcium (Total)	61200 ug/L	1000	EPA 200.7
Magnesium (Total)	22800 ug/L	1000	EPA 200.7
COD	15.3 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.52 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.5 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.088 mg/L	0.05	EPA 365.1
TKN	0.78 mg/L	0.5	EPA 351.2
TOC	3.7 mg/L	1	SM5310C

Lab ID #: AB51348	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	290.9 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0136

Sample Date: 7/27/2022

IDEM Sample #: AB52092

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	55.7 %		ASTM D888-09(C)
DO	4.75 mg/L		ASTM D888-09(C)
pH (Field)	7.46 SU		EPA 150.2
Specific Conductance (Field)	181.6 umho/cm		SM2510B
Temperature	23.2 °C		SM2550B(2)
Turbidity (Hach)	116 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121023	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	63.6 mg/L	10	SM2320B
Chloride	5.9 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	71.6 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	56 mg/L	6.2	SM2540D
Solids, Total (TS)	203 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	141 mg/L	10	SM2540C
Sulfate	9.7 mg/L	0.25	EPA 300.0
Calcium (Total)	20300 ug/L	1000	EPA 200.7
Magnesium (Total)	5050 ug/L	1000	EPA 200.7
COD	24.4 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.11 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.4 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.55 mg/L	0.05	EPA 365.1
TKN	1.9 mg/L	0.5	EPA 351.2
TOC	9.8 mg/L	1	SM5310C

Lab ID #: AB52092	Result	Reporting Limit	Method
E. coli	1986.3 MPN/100mL	1	SM9223B

Lab ID #: AB52092b	Result	Reporting Limit	Method
Coliforms (Total)	> 241960 MPN/100mL	241960	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86
			6 - Gale

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0137      **USGS Hydrologic Unit:** 051202020604  
**Stream Name:** Black Creek      **County:** Greene  
**Description:** CR 1075 West      **Latitude:** 38 55 10.33673      **Longitude:** -87 8 37.93967  
**Drainage:** 97.872      **Site Number:** 22T-008

**SiteID:** WWL-06-0137      **Sample Date:** 5/11/2022      **IDEM Sample #:** AB51172  
**Water Flow Type** Glide      **Water Appearance** Murky      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	70.9 %		ASTM D888-09(C)
DO	6.05 mg/L		ASTM D888-09(C)
pH (Field)	7.31 SU		EPA 150.2
Specific Conductance (Field)	830 umho/cm		SM2510B
Temperature	23.1 °C		SM2550B(2)
Turbidity (Hach)	34.7 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 50316481010	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	161 mg/L	2	SM2320B
Chloride	9.8 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	378 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	41.8 mg/L	4.5	SM2540D
Solids, Total (TS)	625 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	563 mg/L	10	SM2540C
Sulfate	281 mg/L	25	EPA 300.0
Calcium (Total)	87900 ug/L	1000	EPA 200.7
Magnesium (Total)	38400 ug/L	1000	EPA 200.7
COD	15.3 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.73 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.13 mg/L	0.05	EPA 365.1
TKN	0.76 mg/L	0.5	EPA 351.2
TOC	4.2 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51172	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	275.5 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0137

**Sample Date:** 6/14/2022

**IDEM Sample #:** AB51334

**Water Flow Type**  Glide

**Water Appearance** Brown

**Water Depth**  Algae?

**Water Flow (cf/sec):**

Flow Estimated?

Aquatic Life?

**Canopy Closed %** 0-20%

**Sampler Comments:**

<b>Lab ID #:</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
% Sat	69.3 %		ASTM D888-09(C)
DO	5.5 mg/L		ASTM D888-09(C)
pH (Field)	7.62 SU		EPA 150.2
Specific Conductance (Field)	944 umho/cm		SM2510B
Temperature	27 °C		SM2550B(2)
Turbidity (Hach)	58.1 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

<b>Lab ID #: 50319032010</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Alkalinity (as CaCO3)	168 mg/L	2	SM2320B
Chloride	10.8 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	410 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	66.7 mg/L	8.3	SM2540D
Solids, Total (TS)	718 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	624 mg/L	10	SM2540C
Sulfate	283 mg/L	25	EPA 300.0
Calcium (Total)	95000 ug/L	1000	EPA 200.7
Magnesium (Total)	42000 ug/L	1000	EPA 200.7
COD	12 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.68 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.12 mg/L	0.05	EPA 365.1
TKN	0.58 mg/L	0.5	EPA 351.2
TOC	4.3 mg/L	1	SM5310C

<b>Lab ID #: AB51334</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	344.8 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0137

Sample Date: 7/26/2022

IDEM Sample #: AB52078

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	63.3 %		ASTM D888-09(C)
DO	5.4 mg/L		ASTM D888-09(C)
pH (Field)	7.6 SU		EPA 150.2
Specific Conductance (Field)	407.5 umho/cm		SM2510B
Temperature	23.2 °C		SM2550B(2)
Turbidity (Hach)	120 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121010	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	71.3 mg/L	10	SM2320B
Chloride	5.3 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	145 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	91.8 mg/L	4.2	SM2540D
Solids, Total (TS)	433 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	252 mg/L	10	SM2540C
Sulfate	112 mg/L	2.5	EPA 300.0
Calcium (Total)	34100 ug/L	1000	EPA 200.7
Magnesium (Total)	14500 ug/L	1000	EPA 200.7
COD	20.5 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.7 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.26 mg/L	0.05	EPA 365.1
TKN	1.4 mg/L	0.5	EPA 351.2
TOC	7.1 mg/L	1	SM5310C

Lab ID #: AB52078b	Result	Reporting Limit	Method
Coliforms (Total)	> 241960 MPN/100mL	241960	SM9223B
E. coli	4170 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	2 - Mod./Light	3 - 46-60
4 - Cloudy		3 - Moderate	4 - 61-75
5 - Mist		4 - Mod./Strong	5 - 76-85
6 - Fog		5 - Strong	6 - > 86
7 - Shower		6 - Gale	



**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0138      **USGS Hydrologic Unit:** 051202020604  
**Stream Name:** Black Creek      **County:** Greene  
**Description:** CR 610 South      **Latitude:** 38 56 10.74221      **Longitude:** -87 8 18.75923  
**Drainage:** 91.972      **Site Number:** 22T-009

**SiteID:** WWL-06-0138      **Sample Date:** 5/11/2022      **IDEM Sample #:** AB51173  
**Water Flow Type** Glide      **Water Appearance** Murky      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	63.7 %		ASTM D888-09(C)
DO	5.46 mg/L		ASTM D888-09(C)
pH (Field)	7.46 SU		EPA 150.2
Specific Conductance (Field)	855 umho/cm		SM2510B
Temperature	22.8 °C		SM2550B(2)
Turbidity (Hach)	45.5 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	0 Lookup		Observation

<u>Lab ID #:</u> 50316481011	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	155 mg/L	2	SM2320B
Chloride	10.1 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	382 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	56.8 mg/L	6.1	SM2540D
Solids, Total (TS)	675 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	587 mg/L	10	SM2540C
Sulfate	297 mg/L	25	EPA 300.0
Calcium (Total)	88200 ug/L	1000	EPA 200.7
Magnesium (Total)	39200 ug/L	1000	EPA 200.7
COD	18.1 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.11 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.56 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.18 mg/L	0.05	EPA 365.1
TKN	0.82 mg/L	0.5	EPA 351.2
TOC	4.5 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51173	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	209.8 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0138

Sample Date: 6/14/2022

IDEM Sample #: AB51335

Water Flow Type Glide

Water Appearance Murky

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	64.1 %		ASTM D888-09(C)
DO	5.16 mg/L		ASTM D888-09(C)
pH (Field)	7.64 SU		EPA 150.2
Specific Conductance (Field)	949 umho/cm		SM2510B
Temperature	27.2 °C		SM2550B(2)
Turbidity (Hach)	73.3 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

Lab ID #: 50319032011	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	165 mg/L	2	SM2320B
Chloride	11.2 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	429 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	99.5 mg/L	12.5	SM2540D
Solids, Total (TS)	802 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	669 mg/L	10	SM2540C
Sulfate	335 mg/L	25	EPA 300.0
Calcium (Total)	97600 ug/L	1000	EPA 200.7
Magnesium (Total)	45000 ug/L	1000	EPA 200.7
COD	15.8 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.44 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.22 mg/L	0.05	EPA 365.1
TKN	1.1 mg/L	0.5	EPA 351.2
TOC	4.4 mg/L	1	SM5310C

Lab ID #: AB51335	Result	Reporting Limit	Method
E. coli	435.2 MPN/100mL	1	SM9223B

Lab ID #: AB51335b	Result	Reporting Limit	Method
Coliforms (Total)	8090 MPN/100mL	100	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0138

Sample Date: 7/26/2022

IDEM Sample #: AB52079

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	66.5 %		ASTM D888-09(C)
DO	5.73 mg/L		ASTM D888-09(C)
pH (Field)	7.72 SU		EPA 150.2
Specific Conductance (Field)	333.9 umho/cm		SM2510B
Temperature	22.7 °C		SM2550B(2)
Turbidity (Hach)	158 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121011	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	63.9 mg/L	10	SM2320B
Chloride	5.1 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	123 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	164 mg/L	12.5	SM2540D
Solids, Total (TS)	433 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	230 mg/L	10	SM2540C
Sulfate	78.2 mg/L	2.5	EPA 300.0
Calcium (Total)	29800 ug/L	1000	EPA 200.7
Magnesium (Total)	11900 ug/L	1000	EPA 200.7
COD	18.9 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.11 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.8 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.31 mg/L	0.05	EPA 365.1
TKN	1.4 mg/L	0.5	EPA 351.2
TOC	7.8 mg/L	1	SM5310C

Lab ID #: AB52079b	Result	Reporting Limit	Method
Coliforms (Total)	> 241960 MPN/100mL	241960	SM9223B
E. coli	6240 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	2 - Mod./Light	3 - 46-60
4 - Cloudy		3 - Moderate	4 - 61-75
5 - Mist		4 - Mod./Strong	5 - 76-85
6 - Fog		5 - Strong	6 - > 86
7 - Shower		6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0152      **USGS Hydrologic Unit:** 051202020602  
**Stream Name:** Beehunter Ditch      **County:** Greene  
**Description:** CR 200 South      **Latitude:** 38 59 40.50644      **Longitude:** -87 7 25.42912  
**Drainage:** 27.545      **Site Number:** 22T-010

**SiteID:** WWL-06-0152      **Sample Date:** 5/11/2022      **IDEM Sample #:** AB51174  
**Water Flow Type** Glide      **Water Appearance** Murky      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	71.9 %		ASTM D888-09(C)
DO	6.18 mg/L		ASTM D888-09(C)
pH (Field)	7.65 SU		EPA 150.2
Specific Conductance (Field)	669 umho/cm		SM2510B
Temperature	22.8 °C		SM2550B(2)
Turbidity (Hach)	46.6 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 50316481012	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	206 mg/L	2	SM2320B
Chloride	15.5 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	303 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	59.2 mg/L	5	SM2540D
Solids, Total (TS)	495 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	426 mg/L	10	SM2540C
Sulfate	143 mg/L	2.5	EPA 300.0
Calcium (Total)	66700 ug/L	1000	EPA 200.7
Magnesium (Total)	33100 ug/L	1000	EPA 200.7
COD	13.9 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.16 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.2 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.2 mg/L	0.05	EPA 365.1
TKN	0.72 mg/L	0.5	EPA 351.2
TOC	3.9 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51174	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	866.4 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0152      **Sample Date:** 6/14/2022      **IDEM Sample #:** AB51336  
**Water Flow Type**    Glide      **Water Appearance**    Murky      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<b>Lab ID #:</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
% Sat	77.1 %		ASTM D888-09(C)
DO	6.24 mg/L		ASTM D888-09(C)
pH (Field)	7.1 SU		EPA 150.2
Specific Conductance (Field)	858 umho/cm		SM2510B
Temperature	25.9 °C		SM2550B(2)
Turbidity (Hach)	51.9 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

<b>Lab ID #: 50319032012</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Alkalinity (as CaCO3)	237 mg/L	2	SM2320B
Chloride	13.1 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	400 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	43.2 mg/L	3.1	SM2540D
Solids, Total (TS)	640 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	548 mg/L	10	SM2540C
Sulfate	226 mg/L	2.5	EPA 300.0
Calcium (Total)	81100 ug/L	1000	EPA 200.7
Magnesium (Total)	48000 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.66 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.12 mg/L	0.05	EPA 365.1
TKN	0.55 mg/L	0.5	EPA 351.2
TOC	3.4 mg/L	1	SM5310C

<b>Lab ID #: AB51336</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
E. coli	686.7 MPN/100mL	1	SM9223B

<b>Lab ID #: AB51336b</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Coliforms (Total)	34480 MPN/100mL	100	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0152

Sample Date: 7/26/2022

IDEM Sample #: AB52080

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	82.7 %		ASTM D888-09(C)
DO	7.32 mg/L		ASTM D888-09(C)
pH (Field)	7.42 SU		EPA 150.2
Specific Conductance (Field)	183.9 umho/cm		SM2510B
Temperature	21.3 °C		SM2550B(2)
Turbidity (Hach)	132 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121012	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	53.5 mg/L	10	SM2320B
Chloride	7.9 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	77.4 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	112 mg/L	6.2	SM2540D
Solids, Total (TS)	329 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	137 mg/L	10	SM2540C
Sulfate	18.2 mg/L	0.25	EPA 300.0
Calcium (Total)	21800 ug/L	1000	EPA 200.7
Magnesium (Total)	5600 ug/L	1000	EPA 200.7
COD	19.3 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.2 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.2 mg/L	0.05	EPA 365.1
TKN	1.5 mg/L	0.5	EPA 351.2
TOC	8.5 mg/L	1	SM5310C

Lab ID #: AB52080b	Result	Reporting Limit	Method
Coliforms (Total)	> 241960 MPN/100mL	241960	SM9223B
E. coli	9600 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	1 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	2 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		3 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0140      **USGS Hydrologic Unit:** 051202020602  
**Stream Name:** Beehunter Ditch      **County:** Greene  
**Description:** CR 100 South      **Latitude:** 39 0 32.78467      **Longitude:** -87 7 32.24568  
**Drainage:** 10.143      **Site Number:** 22T-011

**SiteID:** WWL-06-0140      **Sample Date:** 5/11/2022      **IDEM Sample #:** AB51175  
**Water Flow Type** Glide      **Water Appearance** Murky      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	65.6 %		ASTM D888-09(C)
DO	5.68 mg/L		ASTM D888-09(C)
pH (Field)	7.35 SU		EPA 150.2
Specific Conductance (Field)	544 umho/cm		SM2510B
Temperature	22.4 °C		SM2550B(2)
Turbidity (Hach)	27.4 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 50316481013	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	173 mg/L	2	SM2320B
Chloride	32.3 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	216 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	35.8 mg/L	4.3	SM2540D
Solids, Total (TS)	351 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	309 mg/L	10	SM2540C
Sulfate	52.5 mg/L	2.5	EPA 300.0
Calcium (Total)	54900 ug/L	1000	EPA 200.7
Magnesium (Total)	19100 ug/L	1000	EPA 200.7
COD	17.9 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.18 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.7 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.32 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	4.5 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51175	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	770.1 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0140      Sample Date: 6/14/2022      IDEM Sample #: AB51337  
 Water Flow Type    Glide      Water Appearance    Brown      Water Depth       Algae?  
 Water Flow (cf/sec):       Flow Estimated?       Aquatic Life?      Canopy Closed %    0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	69.5 %		ASTM D888-09(C)
DO	5.6 mg/L		ASTM D888-09(C)
pH (Field)	7.73 SU		EPA 150.2
Specific Conductance (Field)	694 umho/cm		SM2510B
Temperature	25.9 °C		SM2550B(2)
Turbidity (Hach)	27.2 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50319032013	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	198 mg/L	2	SM2320B
Chloride	58.1 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	247 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	38.2 mg/L	5	SM2540D
Solids, Total (TS)	422 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	380 mg/L	10	SM2540C
Sulfate	58.7 mg/L	2.5	EPA 300.0
Calcium (Total)	62200 ug/L	1000	EPA 200.7
Magnesium (Total)	22200 ug/L	1000	EPA 200.7
COD	12.6 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.14 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.4 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.29 mg/L	0.05	EPA 365.1
TKN	0.71 mg/L	0.5	EPA 351.2
TOC	3.7 mg/L	1	SM5310C

Lab ID #: AB51337	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	1986.3 MPN/100mL	1	SM9223B



**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0140

Sample Date: 7/26/2022

IDEM Sample #: AB52081

Water Flow Type Riffle

Water Appearance Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	80.9 %		ASTM D888-09(C)
DO	7.13 mg/L		ASTM D888-09(C)
pH (Field)	7.54 SU		EPA 150.2
Specific Conductance (Field)	182.9 umho/cm		SM2510B
Temperature	21.6 °C		SM2550B(2)
Turbidity (Hach)	71.1 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121013	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	60.3 mg/L	10	SM2320B
Chloride	7.5 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	78 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	76 mg/L	6.2	SM2540D
Solids, Total (TS)	259 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	127 mg/L	10	SM2540C
Sulfate	11.7 mg/L	0.25	EPA 300.0
Calcium (Total)	23400 ug/L	1000	EPA 200.7
Magnesium (Total)	4760 ug/L	1000	EPA 200.7
COD	22.7 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.4 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.23 mg/L	0.05	EPA 365.1
TKN	1.6 mg/L	0.5	EPA 351.2
TOC	9.1 mg/L	1	SM5310C

Lab ID #: AB52081b	Result	Reporting Limit	Method
Coliforms (Total)	> 241960 MPN/100mL	241960	SM9223B
E. coli	12740 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	1 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	2 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		3 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86
			6 - Gale

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0141      **USGS Hydrologic Unit:** 051202020602  
**Stream Name:** Tributary of Beehunter Ditch      **County:** Greene  
**Description:** SR 54      **Latitude:** 39 2 13.44707      **Longitude:** -87 9 8.02919  
**Drainage:** 3.705      **Site Number:** 22T-012

**SiteID:** WWL-06-0141      **Sample Date:** 5/11/2022      **IDEM Sample #:** AB51178  
**Water Flow Type** Riffle      **Water Appearance** Clear      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	91.4 %		ASTM D888-09(C)
DO	7.84 mg/L		ASTM D888-09(C)
pH (Field)	7.7 SU		EPA 150.2
Specific Conductance (Field)	349 umho/cm		SM2510B
Temperature	22.9 °C		SM2550B(2)
Turbidity (Hach)	5.67 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 50316481016	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	199 mg/L	2	SM2320B
Chloride	8 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	272 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	2.5 mg/L	2.5	SM2540D
Solids, Total (TS)	357 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	338 mg/L	10	SM2540C
Sulfate	91.3 mg/L	2.5	EPA 300.0
Calcium (Total)	62300 ug/L	1000	EPA 200.7
Magnesium (Total)	28300 ug/L	1000	EPA 200.7
COD	12 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.29 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.07 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	3.5 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51178	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	920.8 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0141      Sample Date: 6/14/2022      IDEM Sample #: AB51340  
 Water Flow Type Riffle      Water Appearance Clear      Water Depth  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed % 0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	80.5 %		ASTM D888-09(C)
DO	6.49 mg/L		ASTM D888-09(C)
pH (Field)	7.78 SU		EPA 150.2
Specific Conductance (Field)	639 umho/cm		SM2510B
Temperature	26.2 °C		SM2550B(2)
Turbidity (Hach)	7.55 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50319032016	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	227 mg/L	2	SM2320B
Chloride	9.1 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	307 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	6.4 mg/L	2.5	SM2540D
Solids, Total (TS)	404 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	383 mg/L	10	SM2540C
Sulfate	106 mg/L	2.5	EPA 300.0
Calcium (Total)	68700 ug/L	1000	EPA 200.7
Magnesium (Total)	32800 ug/L	1000	EPA 200.7
COD	13.8 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.47 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.054 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	3.3 mg/L	1	SM5310C

Lab ID #: AB51340	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	> 2419.6 MPN/100mL	2419.6	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0141

Sample Date: 7/26/2022

IDEM Sample #: AB52084

Water Flow Type Riffle

Water Appearance Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	81.8 %		ASTM D888-09(C)
DO	7.13 mg/L		ASTM D888-09(C)
pH (Field)	7.71 SU		EPA 150.2
Specific Conductance (Field)	220.6 umho/cm		SM2510B
Temperature	22.2 °C		SM2550B(2)
Turbidity (Hach)	44.8 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121016	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	75.5 mg/L	10	SM2320B
Chloride	6 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	82.3 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	44 mg/L	6.2	SM2540D
Solids, Total (TS)	242 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	145 mg/L	10	SM2540C
Sulfate	20.2 mg/L	0.25	EPA 300.0
Calcium (Total)	23100 ug/L	1000	EPA 200.7
Magnesium (Total)	5980 ug/L	1000	EPA 200.7
COD	29.2 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.64 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.29 mg/L	0.05	EPA 365.1
TKN	1.5 mg/L	0.5	EPA 351.2
TOC	12 mg/L	1	SM5310C

Lab ID #: AB52084	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	> 2419.6 MPN/100mL	2419.6	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	1 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	2 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		3 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0142      **USGS Hydrologic Unit:** 051202020602  
**Stream Name:** Buck Creek      **County:** Greene  
**Description:** CR 100 South      **Latitude:** 39 0 32.98409      **Longitude:** -87 6 32.83181  
**Drainage:** 14.477      **Site Number:** 22T-013

**SiteID:** WWL-06-0142      **Sample Date:** 5/11/2022      **IDEM Sample #:** AB51176  
**Water Flow Type** Glide      **Water Appearance** Murky      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	88.5 %		ASTM D888-09(C)
DO	7.64 mg/L		ASTM D888-09(C)
pH (Field)	7.85 SU		EPA 150.2
Specific Conductance (Field)	788 umho/cm		SM2510B
Temperature	22.5 °C		SM2550B(2)
Turbidity (Hach)	30.3 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	0 Lookup		Observation

<u>Lab ID #:</u> 50316481014	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	229 mg/L	2	SM2320B
Chloride	8.5 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	365 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	37.7 mg/L	4.5	SM2540D
Solids, Total (TS)	555 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	532 mg/L	10	SM2540C
Sulfate	205 mg/L	2.5	EPA 300.0
Calcium (Total)	74900 ug/L	1000	EPA 200.7
Magnesium (Total)	43100 ug/L	1000	EPA 200.7
COD	12.8 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.68 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.1 mg/L	0.05	EPA 365.1
TKN	0.51 mg/L	0.5	EPA 351.2
TOC	3 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51176	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	686.7 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0142      Sample Date: 6/14/2022      IDEM Sample #: AB51338  
 Water Flow Type    Glide      Water Appearance    Murky      Water Depth       Algae?  
 Water Flow (cf/sec):       Flow Estimated?       Aquatic Life?      Canopy Closed %    0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	91.7 %		ASTM D888-09(C)
DO	7.37 mg/L		ASTM D888-09(C)
pH (Field)	7.9 SU		EPA 150.2
Specific Conductance (Field)	919 umho/cm		SM2510B
Temperature	22.6 °C		SM2550B(2)
Turbidity (Hach)	41.9 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50319032014	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	243 mg/L	2	SM2320B
Chloride	5.4 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	431 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	36.8 mg/L	4.2	SM2540D
Solids, Total (TS)	710 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	610 mg/L	10	SM2540C
Sulfate	262 mg/L	25	EPA 300.0
Calcium (Total)	84600 ug/L	1000	EPA 200.7
Magnesium (Total)	53400 ug/L	1000	EPA 200.7
COD	10.3 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.36 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	3.2 mg/L	1	SM5310C

Lab ID #: AB51338	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	1119.9 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0142

Sample Date: 7/26/2022

IDEM Sample #: AB52082

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	82.6 %		ASTM D888-09(C)
DO	7.29 mg/L		ASTM D888-09(C)
pH (Field)	7.29 SU		EPA 150.2
Specific Conductance (Field)	186.8 umho/cm		SM2510B
Temperature	21.5 °C		SM2550B(2)
Turbidity (Hach)	109 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121014	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	51.2 mg/L	10	SM2320B
Chloride	6 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	75.6 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	118 mg/L	10	SM2540D
Solids, Total (TS)	307 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	146 mg/L	10	SM2540C
Sulfate	23.7 mg/L	2.5	EPA 300.0
Calcium (Total)	19600 ug/L	1000	EPA 200.7
Magnesium (Total)	6500 ug/L	1000	EPA 200.7
COD	22.8 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.85 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.21 mg/L	0.05	EPA 365.1
TKN	1.4 mg/L	0.5	EPA 351.2
TOC	9.2 mg/L	1	SM5310C

Lab ID #: AB52082b	Result	Reporting Limit	Method
Coliforms (Total)	> 241960 MPN/100mL	241960	SM9223B
E. coli	9340 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	2 - Mod./Light	3 - 46-60
4 - Cloudy		3 - Moderate	4 - 61-75
5 - Mist		4 - Mod./Strong	5 - 76-85
6 - Fog		5 - Strong	6 - > 86
7 - Shower		6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0143      **USGS Hydrologic Unit:** 051202020602  
**Stream Name:** Buck Creek      **County:** Greene  
**Description:** Buck Creek Road      **Latitude:** 39 2 19.34668      **Longitude:** -87 6 33.02346  
**Drainage:** 10.037      **Site Number:** 22T-014

**SiteID:** WWL-06-0143      **Sample Date:** 5/11/2022      **IDEM Sample #:** AB51177  
**Water Flow Type** Glide      **Water Appearance** Clear      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	101.9 %		ASTM D888-09(C)
DO	8.84 mg/L		ASTM D888-09(C)
pH (Field)	8.03 SU		EPA 150.2
Specific Conductance (Field)	723 umho/cm		SM2510B
Temperature	22.3 °C		SM2550B(2)
Turbidity (Hach)	10.6 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

<u>Lab ID #:</u> 50316481015	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	221 mg/L	2	SM2320B
Chloride	7.1 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	384 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	8 mg/L	2.5	SM2540D
Solids, Total (TS)	510 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	513 mg/L	10	SM2540C
Sulfate	182 mg/L	2.5	EPA 300.0
Calcium (Total)	73700 ug/L	1000	EPA 200.7
Magnesium (Total)	48500 ug/L	1000	EPA 200.7
COD	10.9 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.63 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	2.8 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51177	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	325.5 MPN/100mL	1	SM9223B



**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0143

Sample Date: 6/14/2022

IDEM Sample #: AB51339

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	93.8 %		ASTM D888-09(C)
DO	7.59 mg/L		ASTM D888-09(C)
pH (Field)	7.99 SU		EPA 150.2
Specific Conductance (Field)	889 umho/cm		SM2510B
Temperature	26 °C		SM2550B(2)
Turbidity (Hach)	13 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50319032015	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	234 mg/L	2	SM2320B
Chloride	4.2 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	447 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	19.1 mg/L	2.8	SM2540D
Solids, Total (TS)	652 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	613 mg/L	10	SM2540C
Sulfate	258 mg/L	25	EPA 300.0
Calcium (Total)	84500 ug/L	1000	EPA 200.7
Magnesium (Total)	57400 ug/L	1000	EPA 200.7
COD	14.1 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.25 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	3.3 mg/L	1	SM5310C

Lab ID #: AB51339	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	686.7 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0143

Sample Date: 7/26/2022

IDEM Sample #: AB52083

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	82.6 %		ASTM D888-09(C)
DO	7.27 mg/L		ASTM D888-09(C)
pH (Field)	7.53 SU		EPA 150.2
Specific Conductance (Field)	200.2 umho/cm		SM2510B
Temperature	21.6 °C		SM2550B(2)
Turbidity (Hach)	147 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121015	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	59.3 mg/L	10	SM2320B
Chloride	6.9 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	84.6 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	146 mg/L	8.3	SM2540D
Solids, Total (TS)	396 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	167 mg/L	10	SM2540C
Sulfate	22.8 mg/L	0.25	EPA 300.0
Calcium (Total)	20900 ug/L	1000	EPA 200.7
Magnesium (Total)	7890 ug/L	1000	EPA 200.7
COD	24.7 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.73 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.29 mg/L	0.05	EPA 365.1
TKN	1.7 mg/L	0.5	EPA 351.2
TOC	10.2 mg/L	1	SM5310C

Lab ID #: AB52083b	Result	Reporting Limit	Method
Coliforms (Total)	> 241960 MPN/100mL	241960	SM9223B
E. coli	27550 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	2 - Mod./Light	3 - 46-60
4 - Cloudy		3 - Moderate	4 - 61-75
5 - Mist		4 - Mod./Strong	5 - 76-85
6 - Fog		5 - Strong	6 - > 86
7 - Shower		6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL060-0001      **USGS Hydrologic Unit:** 051202020603  
**Stream Name:** Black Creek Ditch      **County:** Greene  
**Description:** CR 1100 West      **Latitude:** 38 57 43.41582      **Longitude:** -87 8 55.01252  
**Drainage:** 54.305      **Site Number:** 22T-015

**SiteID:** WWL060-0001      **Sample Date:** 5/11/2022      **IDEM Sample #:** AB51192  
**Water Flow Type** Glide      **Water Appearance** Brown      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	63.4 %		ASTM D888-09(C)
DO	5.44 mg/L		ASTM D888-09(C)
pH (Field)	7.47 SU		EPA 150.2
Specific Conductance (Field)	938 umho/cm		SM2510B
Temperature	22.8 °C		SM2550B(2)
Turbidity (Hach)	58.1 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 50316481008	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	136 mg/L	2	SM2320B
Chloride	7.7 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	429 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	65 mg/L	7.4	SM2540D
Solids, Total (TS)	760 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	657 mg/L	10	SM2540C
Sulfate	366 mg/L	25	EPA 300.0
Calcium (Total)	98600 ug/L	1000	EPA 200.7
Magnesium (Total)	44400 ug/L	1000	EPA 200.7
COD	21.2 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.28 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.16 mg/L	0.05	EPA 365.1
TKN	0.81 mg/L	0.5	EPA 351.2
TOC	4.6 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51192	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	235.9 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL060-0001

Sample Date: 6/14/2022

IDEM Sample #: AB51354

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	59.6 %		ASTM D888-09(C)
DO	4.74 mg/L		ASTM D888-09(C)
pH (Field)	7.41 SU		EPA 150.2
Specific Conductance (Field)	1076 umho/cm		SM2510B
Temperature	26.8 °C		SM2550B(2)
Turbidity (Hach)	80.3 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50319032008	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	147 mg/L	2	SM2320B
Chloride	7.7 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	483 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	94.7 mg/L	8.3	SM2540D
Solids, Total (TS)	868 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	756 mg/L	10	SM2540C
Sulfate	431 mg/L	25	EPA 300.0
Calcium (Total)	109000 ug/L	1000	EPA 200.7
Magnesium (Total)	51200 ug/L	1000	EPA 200.7
COD	20.3 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.23 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.12 mg/L	0.05	EPA 365.1
TKN	0.77 mg/L	0.5	EPA 351.2
TOC	4.5 mg/L	1	SM5310C

Lab ID #: AB51354	Result	Reporting Limit	Method
E. coli	344.8 MPN/100mL	1	SM9223B

Lab ID #: AB51354b	Result	Reporting Limit	Method
Coliforms (Total)	11980 MPN/100mL	100	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL060-0001

Sample Date: 7/26/2022

IDEM Sample #: AB52098

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	24.1 %		ASTM D888-09(C)
DO	6.36 mg/L		ASTM D888-09(C)
pH (Field)	7.76 SU		EPA 150.2
Specific Conductance (Field)	523 umho/cm		SM2510B
Temperature	22.9 °C		SM2550B(2)
Turbidity (Hach)	183 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50322121008	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	73.2 mg/L	10	SM2320B
Chloride	6.3 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	186 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	145 mg/L	8.3	SM2540D
Solids, Total (TS)	507 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	340 mg/L	10	SM2540C
Sulfate	173 mg/L	2.5	EPA 300.0
Calcium (Total)	42200 ug/L	1000	EPA 200.7
Magnesium (Total)	19600 ug/L	1000	EPA 200.7
COD	17.8 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.64 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.24 mg/L	0.05	EPA 365.1
TKN	1.3 mg/L	0.5	EPA 351.2
TOC	6.8 mg/L	1	SM5310C

Lab ID #: AB52098b	Result	Reporting Limit	Method
Coliforms (Total)	> 241960 MPN/100mL	241960	SM9223B
E. coli	5280 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	2 - Mod./Light	3 - 46-60
4 - Cloudy		3 - Moderate	4 - 61-75
5 - Mist		4 - Mod./Strong	5 - 76-85
6 - Fog		5 - Strong	6 - > 86
7 - Shower		6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0144      **USGS Hydrologic Unit:** 051202020603  
**Stream Name:** Brewer Ditch      **County:** Greene  
**Description:** CR 1200 West      **Latitude:** 38 57 35.38008      **Longitude:** -87 10 2.88337  
**Drainage:** 18.719      **Site Number:** 22T-016

**SiteID:** WWL-06-0144      **Sample Date:** 5/11/2022      **IDEM Sample #:** AB51191  
**Water Flow Type** Glide      **Water Appearance** Brown      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	67.2 %		ASTM D888-09(C)
DO	5.87 mg/L		ASTM D888-09(C)
pH (Field)	7.53 SU		EPA 150.2
Specific Conductance (Field)	1495 umho/cm		SM2510B
Temperature	21.8 °C		SM2550B(2)
Turbidity (Hach)	89.5 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

<u>Lab ID #:</u> 50316481007	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	188 mg/L	2	SM2320B
Chloride	11.4 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	646 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	102 mg/L	7.1	SM2540D
Solids, Total (TS)	1290 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	1140 mg/L	20	SM2540C
Sulfate	669 mg/L	25	EPA 300.0
Calcium (Total)	141000 ug/L	1000	EPA 200.7
Magnesium (Total)	71500 ug/L	1000	EPA 200.7
COD	13.7 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.12 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.88 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.082 mg/L	0.05	EPA 365.1
TKN	0.54 mg/L	0.5	EPA 351.2
TOC	3.2 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51191b	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	4260 MPN/100mL	100	SM9223B
E. coli	410 MPN/100mL	100	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0144      Sample Date: 6/13/2022      IDEM Sample #: AB51353  
 Water Flow Type    Glide      Water Appearance    Murky      Water Depth       Algae?  
 Water Flow (cf/sec):       Flow Estimated?       Aquatic Life?      Canopy Closed %    0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	110.5 %		ASTM D888-09(C)
DO	8.74 mg/L		ASTM D888-09(C)
pH (Field)	8.17 SU		EPA 150.2
Specific Conductance (Field)	1549 umho/cm		SM2510B
Temperature	27.4 °C		SM2550B(2)
Turbidity (Hach)	25.8 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50319032007	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	178 mg/L	2	SM2320B
Chloride	11.1 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	697 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	37.9 mg/L	3.8	SM2540D
Solids, Total (TS)	1200 mg/L	40	SM2540B
Solids, Total Dissolved (TDS)	1120 mg/L	20	SM2540C
Sulfate	682 mg/L	25	EPA 300.0
Calcium (Total)	149000 ug/L	1000	EPA 200.7
Magnesium (Total)	78900 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.48 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	3.2 mg/L	1	SM5310C

Lab ID #: AB51353	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	325.5 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0144

Sample Date: 7/26/2022

IDEM Sample #: AB52097

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	80.6 %		ASTM D888-09(C)
DO	6.98 mg/L		ASTM D888-09(C)
pH (Field)	7.82 SU		EPA 150.2
Specific Conductance (Field)	540 umho/cm		SM2510B
Temperature	22.4 °C		SM2550B(2)
Turbidity (Hach)	167 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

Lab ID #: 50322121007	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	73.6 mg/L	10	SM2320B
Chloride	6.2 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	161 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	158 mg/L	8.3	SM2540D
Solids, Total (TS)	588 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	364 mg/L	10	SM2540C
Sulfate	181 mg/L	2.5	EPA 300.0
Calcium (Total)	36100 ug/L	1000	EPA 200.7
Magnesium (Total)	17200 ug/L	1000	EPA 200.7
COD	17.5 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.78 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.27 mg/L	0.05	EPA 365.1
TKN	0.91 mg/L	0.5	EPA 351.2
TOC	6.8 mg/L	1	SM5310C

Lab ID #: AB52097b	Result	Reporting Limit	Method
Coliforms (Total)	> 241960 MPN/100mL	241960	SM9223B
E. coli	6500 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	2 - Mod./Light	3 - 46-60
4 - Cloudy		3 - Moderate	4 - 61-75
5 - Mist		4 - Mod./Strong	5 - 76-85
6 - Fog		5 - Strong	6 - > 86
7 - Shower		6 - Gale	



**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0145      **USGS Hydrologic Unit:** 051202020603  
**Stream Name:** Tributary of Brewer Ditch      **County:** Greene  
**Description:** CR 1525 West      **Latitude:** 38 59 2.23969      **Longitude:** -87 13 47.48311  
**Drainage:** 2.922      **Site Number:** 22T-017

**SiteID:** WWL-06-0145      **Sample Date:** 5/10/2022      **IDEM Sample #:** AB51188  
**Water Flow Type** Glide      **Water Appearance** Clear      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	148.4 %		ASTM D888-09(C)
DO	12.25 mg/L		ASTM D888-09(C)
pH (Field)	8.03 SU		EPA 150.2
Specific Conductance (Field)	1899 umho/cm		SM2510B
Temperature	24.8 °C		SM2550B(2)
Turbidity (Hach)	3.73 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

<u>Lab ID #:</u> 50316481004	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	156 mg/L	2	SM2320B
Chloride	2.4 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	1270 mg/L	20	SM2340B
Solids, Suspended Total, (TSS)	< 2.5 mg/L	2.5	SM2540D
Solids, Total (TS)	1780 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	1690 mg/L	20	SM2540C
Sulfate	1160 mg/L	25	EPA 300.0
Calcium (Total)	286000 ug/L	2000	EPA 200.7
Magnesium (Total)	134000 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	2.3 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51188	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	98.7 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0145      Sample Date: 6/13/2022      IDEM Sample #: AB51350  
 Water Flow Type: Glide      Water Appearance: Clear      Water Depth:  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed %: 0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	119.2 %		ASTM D888-09(C)
DO	9.39 mg/L		ASTM D888-09(C)
pH (Field)	7.85 SU		EPA 150.2
Specific Conductance (Field)	2206 umho/cm		SM2510B
Temperature	27.3 °C		SM2550B(2)
Turbidity (Hach)	3.63 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

Lab ID #: 50319032004	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	186 mg/L	2	SM2320B
Chloride	2.4 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	1410 mg/L	20	SM2340B
Solids, Suspended Total, (TSS)	5.1 mg/L	2.5	SM2540D
Solids, Total (TS)	2000 mg/L	40	SM2540B
Solids, Total Dissolved (TDS)	1960 mg/L	20	SM2540C
Sulfate	1260 mg/L	25	EPA 300.0
Calcium (Total)	313000 ug/L	2000	EPA 200.7
Magnesium (Total)	151000 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	2 mg/L	1	SM5310C

Lab ID #: AB51350	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	143.9 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0145

Sample Date: 7/25/2022

IDEM Sample #: AB52094

Water Flow Type  Glide

Water Appearance  Clear

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	91.5 %		ASTM D888-09(C)
DO	7.24 mg/L		ASTM D888-09(C)
pH (Field)	7.79 SU		EPA 150.2
Specific Conductance (Field)	1911 umho/cm		SM2510B
Temperature	27.1 °C		SM2550B(2)
Turbidity (Hach)	20.8 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121004	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	150 mg/L	10	SM2320B
Chloride	2.3 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	1210 mg/L	20	SM2340B
Solids, Suspended Total, (TSS)	38 mg/L	3.1	SM2540D
Solids, Total (TS)	1810 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	1650 mg/L	20	SM2540C
Sulfate	1060 mg/L	25	EPA 300.0
Calcium (Total)	274000 ug/L	2000	EPA 200.7
Magnesium (Total)	128000 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.13 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	3.1 mg/L	1	SM5310C

Lab ID #: AB52094	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	209.8 MPN/100mL	1	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	2 - Mod./Light	3 - 46-60
4 - Cloudy		3 - Moderate	4 - 61-75
5 - Mist		4 - Mod./Strong	5 - 76-85
6 - Fog		5 - Strong	6 - > 86
7 - Shower		6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0121      **USGS Hydrologic Unit:** 051202020603  
**Stream Name:** Spencer Creek      **County:** Sullivan  
**Description:** SR 159      **Latitude:** 38 58 37.45717      **Longitude:** -87 15 36.36725  
**Drainage:** 4.074      **Site Number:** 22T-018

**SiteID:** WWL-06-0121      **Sample Date:** 5/10/2022      **IDEM Sample #:** AB51189  
**Water Flow Type** Glide      **Water Appearance** Clear      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<b>Lab ID #:</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
% Sat	102.2 %		ASTM D888-09(C)
DO	8.78 mg/L		ASTM D888-09(C)
pH (Field)	7.74 SU		EPA 150.2
Specific Conductance (Field)	1320 umho/cm		SM2510B
Temperature	22.7 °C		SM2550B(2)
Turbidity (Hach)	7.11 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

<b>Lab ID #: 50316481005</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Alkalinity (as CaCO3)	166 mg/L	2	SM2320B
Chloride	11.3 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	511 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	5.5 mg/L	2.5	SM2540D
Solids, Total (TS)	996 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	910 mg/L	20	SM2540C
Sulfate	565 mg/L	25	EPA 300.0
Calcium (Total)	104000 ug/L	1000	EPA 200.7
Magnesium (Total)	60800 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.3 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	2.4 mg/L	1	SM5310C

<b>Lab ID #: AB51189</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Coliforms (Total)	1986.3 MPN/100mL	1	SM9223B
E. coli	7.5 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0121      Sample Date: 6/13/2022      IDEM Sample #: AB51351  
 Water Flow Type    Glide      Water Appearance    Clear      Water Depth       Algae?  
 Water Flow (cf/sec):       Flow Estimated?       Aquatic Life?      Canopy Closed %    0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	93.2 %		ASTM D888-09(C)
DO	7.77 mg/L		ASTM D888-09(C)
pH (Field)	7.87 SU		EPA 150.2
Specific Conductance (Field)	1512 umho/cm		SM2510B
Temperature	24.3 °C		SM2550B(2)
Turbidity (Hach)	5.51 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50319032005	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	199 mg/L	2	SM2320B
Chloride	14.7 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	437 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	4.9 mg/L	2.5	SM2540D
Solids, Total (TS)	1060 mg/L	40	SM2540B
Solids, Total Dissolved (TDS)	1020 mg/L	20	SM2540C
Sulfate	601 mg/L	25	EPA 300.0
Calcium (Total)	91000 ug/L	1000	EPA 200.7
Magnesium (Total)	50900 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.79 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	2.4 mg/L	1	SM5310C

Lab ID #: AB51351	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	17.1 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0121

Sample Date: 7/25/2022

IDEM Sample #: AB52095

Water Flow Type Riffle

Water Appearance Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	89.3 %		ASTM D888-09(C)
DO	7.02 mg/L		ASTM D888-09(C)
pH (Field)	8.11 SU		EPA 150.2
Specific Conductance (Field)	1774 umho/cm		SM2510B
Temperature	27.5 °C		SM2550B(2)
Turbidity (Hach)	53.7 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121005	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	238 mg/L	10	SM2320B
Chloride	23.1 mg/L	2.5	EPA 300.0
Hardness (as CaCO3)	221 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	36 mg/L	5	SM2540D
Solids, Total (TS)	1220 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	1140 mg/L	20	SM2540C
Sulfate	645 mg/L	25	EPA 300.0
Calcium (Total)	50300 ug/L	1000	EPA 200.7
Magnesium (Total)	23100 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.28 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.4 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.05 mg/L	0.05	EPA 365.1
TKN	1.1 mg/L	0.5	EPA 351.2
TOC	3.6 mg/L	1	SM5310C

Lab ID #: AB52095	Result	Reporting Limit	Method
E. coli	1732.9 MPN/100mL	1	SM9223B

Lab ID #: AB52095b	Result	Reporting Limit	Method
Coliforms (Total)	43520 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86
			6 - Gale

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0146      **USGS Hydrologic Unit:** 051202020601  
**Stream Name:** Black Creek      **County:** Greene  
**Description:** CR 1200 West      **Latitude:** 38 59 18.73809      **Longitude:** -87 10 3.01393  
**Drainage:** 28.896      **Site Number:** 22T-019

**SiteID:** WWL-06-0146      **Sample Date:** 5/10/2022      **IDEM Sample #:** AB51190  
**Water Flow Type** Glide      **Water Appearance** Murky      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	80.1 %		ASTM D888-09(C)
DO	7.07 mg/L		ASTM D888-09(C)
pH (Field)	7.61 SU		EPA 150.2
Specific Conductance (Field)	985 umho/cm		SM2510B
Temperature	21.4 °C		SM2550B(2)
Turbidity (Hach)	19.5 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 50316481006	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	142 mg/L	2	SM2320B
Chloride	7.5 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	490 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	18 mg/L	3	SM2540D
Solids, Total (TS)	770 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	718 mg/L	10	SM2540C
Sulfate	396 mg/L	25	EPA 300.0
Calcium (Total)	114000 ug/L	1000	EPA 200.7
Magnesium (Total)	49800 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.16 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.072 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	4.3 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51190	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	105 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0146      Sample Date: 6/13/2022      IDEM Sample #: AB51352  
 Water Flow Type: Glide      Water Appearance: Brown      Water Depth:  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed %: 0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	68.3 %		ASTM D888-09(C)
DO	5.58 mg/L		ASTM D888-09(C)
pH (Field)	7.76 SU		EPA 150.2
Specific Conductance (Field)	1149 umho/cm		SM2510B
Temperature	25.8 °C		SM2550B(2)
Turbidity (Hach)	34.1 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50319032006	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	155 mg/L	2	SM2320B
Chloride	7.2 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	569 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	49.4 mg/L	4.1	SM2540D
Solids, Total (TS)	924 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	822 mg/L	10	SM2540C
Sulfate	472 mg/L	25	EPA 300.0
Calcium (Total)	130000 ug/L	1000	EPA 200.7
Magnesium (Total)	59300 ug/L	1000	EPA 200.7
COD	10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.14 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	0.55 mg/L	0.5	EPA 351.2
TOC	3.6 mg/L	1	SM5310C

Lab ID #: AB51352	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	224.7 MPN/100mL	1	SM9223B



**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0146

Sample Date: 7/25/2022

IDEM Sample #: AB52096

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	64.5 %		ASTM D888-09(C)
DO	5.25 mg/L		ASTM D888-09(C)
pH (Field)	7.78 SU		EPA 150.2
Specific Conductance (Field)	635 umho/cm		SM2510B
Temperature	25.7 °C		SM2550B(2)
Turbidity (Hach)	55.8 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121006	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	89.9 mg/L	10	SM2320B
Chloride	7.3 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	252 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	37.6 mg/L	5	SM2540D
Solids, Total (TS)	469 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	403 mg/L	10	SM2540C
Sulfate	231 mg/L	2.5	EPA 300.0
Calcium (Total)	57300 ug/L	1000	EPA 200.7
Magnesium (Total)	26500 ug/L	1000	EPA 200.7
COD	17.7 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.41 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.098 mg/L	0.05	EPA 365.1
TKN	0.96 mg/L	0.5	EPA 351.2
TOC	7 mg/L	1	SM5310C

Lab ID #: AB52096b	Result	Reporting Limit	Method
Coliforms (Total)	54750 MPN/100mL	100	SM9223B
E. coli	3890 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - < 32
2 - Scattered	9 - Snow	1 - East (90 Degrees)	1 - 33-45
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27 - West (270 Degrees)	3 - 46-60
5 - Mist			3 - Moderate
6 - Fog			4 - Mod./Strong
7 - Shower			5 - 76-85
			5 - Strong
			6 - > 86
			6 - Gale

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0147      **USGS Hydrologic Unit:** 051202020601  
**Stream Name:** Tributary of Black Creek      **County:** Greene  
**Description:** CR 300 South      **Latitude:** 38 58 55.08817      **Longitude:** -87 9 18.23245  
**Drainage:** 1.61      **Site Number:** 22T-020

**SiteID:** WWL-06-0147      **Sample Date:** 5/11/2022      **IDEM Sample #:** AB51193  
**Water Flow Type**    Glide      **Water Appearance**    Murky      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**    Downstream of bridge (N end) appears stagnant and blocked heavily by agricultural organic matter.

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	94.6 %		ASTM D888-09(C)
DO	8.09 mg/L		ASTM D888-09(C)
pH (Field)	7.41 SU		EPA 150.2
Specific Conductance (Field)	771 umho/cm		SM2510B
Temperature	23.1 °C		SM2550B(2)
Turbidity (Hach)	13.6 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID #:</u> 50316481009	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	62.6 mg/L	2	SM2320B
Chloride	9.3 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	374 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	4.8 mg/L	2.5	SM2540D
Solids, Total (TS)	578 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	558 mg/L	10	SM2540C
Sulfate	322 mg/L	25	EPA 300.0
Calcium (Total)	76300 ug/L	1000	EPA 200.7
Magnesium (Total)	44500 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.28 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.1 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	1.8 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51193	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	39.9 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0147

Sample Date: 6/14/2022

IDEM Sample #: AB51355

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	89.7 %		ASTM D888-09(C)
DO	7.24 mg/L		ASTM D888-09(C)
pH (Field)	7.66 SU		EPA 150.2
Specific Conductance (Field)	746 umho/cm		SM2510B
Temperature	26.1 °C		SM2550B(2)
Turbidity (Hach)	25.5 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 50319032009	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	71.3 mg/L	2	SM2320B
Chloride	9.2 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	332 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	19.3 mg/L	2.5	SM2540D
Solids, Total (TS)	576 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	510 mg/L	10	SM2540C
Sulfate	296 mg/L	25	EPA 300.0
Calcium (Total)	67800 ug/L	1000	EPA 200.7
Magnesium (Total)	39500 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.14 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.19 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	1.9 mg/L	1	SM5310C

Lab ID #: AB51355	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	727 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0147

Sample Date: 7/26/2022

IDEM Sample #: AB52099

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments: Upstream clogged in culvert by agricultural organic matter. Sample collected downstream.

Lab ID #:	Result	Reporting Limit	Method
% Sat	78.6 %		ASTM D888-09(C)
DO	6.95 mg/L		ASTM D888-09(C)
pH (Field)	7.51 SU		EPA 150.2
Specific Conductance (Field)	144.1 umho/cm		SM2510B
Temperature	21.4 °C		SM2550B(2)
Turbidity (Hach)	26.2 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	8 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID #: 50322121009	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	37.4 mg/L	10	SM2320B
Chloride	3.5 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	49.8 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	15.2 mg/L	3.1	SM2540D
Solids, Total (TS)	124 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	87 mg/L	10	SM2540C
Sulfate	9.9 mg/L	0.25	EPA 300.0
Calcium (Total)	15500 ug/L	1000	EPA 200.7
Magnesium (Total)	2710 ug/L	1000	EPA 200.7
COD	19.7 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.28 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.9 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.25 mg/L	0.05	EPA 365.1
TKN	1.4 mg/L	0.5	EPA 351.2
TOC	10.7 mg/L	1	SM5310C

Lab ID #: AB52099	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	> 2419.6 MPN/100mL	2419.6	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - < 32
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - 33-45
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - 46-60
4 - Cloudy		27 - West (270 Degrees)	3 - 61-75
5 - Mist			4 - 76-85
6 - Fog			5 - > 86
7 - Shower			6 - > 86

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0148      **USGS Hydrologic Unit:** 051202020601  
**Stream Name:** Black Creek      **County:** Greene  
**Description:** CR 1400 West      **Latitude:** 39 0 36.20313      **Longitude:** -87 12 14.29766  
**Drainage:** 21.663      **Site Number:** 22T-021

**SiteID:** WWL-06-0148      **Sample Date:** 5/10/2022      **IDEM Sample #:** AB51187  
**Water Flow Type** Glide      **Water Appearance** Clear      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	100.4 %		ASTM D888-09(C)
DO	8.98 mg/L		ASTM D888-09(C)
pH (Field)	7.57 SU		EPA 150.2
Specific Conductance (Field)	1160 umho/cm		SM2510B
Temperature	20.7 °C		SM2550B(2)
Turbidity (Hach)	9.66 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

<u>Lab ID #:</u> 50316481003	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	117 mg/L	2	SM2320B
Chloride	6.5 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	575 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	8.6 mg/L	2.5	SM2540D
Solids, Total (TS)	918 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	872 mg/L	10	SM2540C
Sulfate	551 mg/L	25	EPA 300.0
Calcium (Total)	134000 ug/L	1000	EPA 200.7
Magnesium (Total)	58400 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.24 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	3.6 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51187	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	98.7 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0148      **Sample Date:** 6/13/2022      **IDEM Sample #:** AB51349  
**Water Flow Type**    Glide      **Water Appearance**    Clear      **Water Depth**       **Algae?**  
**Water Flow (cf/sec):**       **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<b>Lab ID #:</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
% Sat	89 %		ASTM D888-09(C)
DO	7.41 mg/L		ASTM D888-09(C)
pH (Field)	7.49 SU		EPA 150.2
Specific Conductance (Field)	1470 umho/cm		SM2510B
Temperature	24.3 °C		SM2550B(2)
Turbidity (Hach)	7.13 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<b>Lab ID #: 50319032003</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Alkalinity (as CaCO3)	125 mg/L	2	SM2320B
Chloride	6.1 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	764 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	7.5 mg/L	2.6	SM2540D
Solids, Total (TS)	1130 mg/L	40	SM2540B
Solids, Total Dissolved (TDS)	1140 mg/L	10	SM2540C
Sulfate	700 mg/L	25	EPA 300.0
Calcium (Total)	175000 ug/L	1000	EPA 200.7
Magnesium (Total)	79400 ug/L	1000	EPA 200.7
COD	10.2 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.25 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	3 mg/L	1	SM5310C

<b>Lab ID #: AB51349</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	365.4 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0148

Sample Date: 7/25/2022

IDEM Sample #: AB52093

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	82.3 %		ASTM D888-09(C)
DO	6.59 mg/L		ASTM D888-09(C)
pH (Field)	7.96 SU		EPA 150.2
Specific Conductance (Field)	833 umho/cm		SM2510B
Temperature	26.5 °C		SM2550B(2)
Turbidity (Hach)	32 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121003	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	101 mg/L	10	SM2320B
Chloride	7.3 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	350 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	25.6 mg/L	3.1	SM2540D
Solids, Total (TS)	627 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	531 mg/L	10	SM2540C
Sulfate	323 mg/L	25	EPA 300.0
Calcium (Total)	75200 ug/L	1000	EPA 200.7
Magnesium (Total)	39300 ug/L	1000	EPA 200.7
COD	13.8 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.33 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.092 mg/L	0.05	EPA 365.1
TKN	0.76 mg/L	0.5	EPA 351.2
TOC	5.9 mg/L	1	SM5310C

Lab ID #: AB52093	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	> 2419.6 MPN/100mL	2419.6	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - Calm
2 - Scattered	9 - Snow	1 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	2 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		3 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0149      **USGS Hydrologic Unit:** 051202020601  
**Stream Name:** Tributary of Black Creek      **County:** Greene  
**Description:** CR 1500 West      **Latitude:** 39 1 23.72131      **Longitude:** -87 13 20.86512  
**Drainage:** 6.394      **Site Number:** 22T-022

**SiteID:** WWL-06-0149      **Sample Date:** 5/10/2022      **IDEM Sample #:** AB51171  
**Water Flow Type** Glide      **Water Appearance** Clear      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<u>Lab ID #:</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	82.5 %		ASTM D888-09(C)
DO	7.73 mg/L		ASTM D888-09(C)
pH (Field)	7.25 SU		EPA 150.2
Specific Conductance (Field)	1396 umho/cm		SM2510B
Temperature	18.8 °C		SM2550B(2)
Turbidity (Hach)	5.42 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

<u>Lab ID #:</u> 50316481001	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	150 mg/L	2	SM2320B
Chloride	4.8 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	828 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	4.9 mg/L	2.5	SM2540D
Solids, Total (TS)	1170 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	1130 mg/L	20	SM2540C
Sulfate	693 mg/L	25	EPA 300.0
Calcium (Total)	175000 ug/L	1000	EPA 200.7
Magnesium (Total)	94700 ug/L	1000	EPA 200.7
COD	10.6 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	3.2 mg/L	1	SM5310C

<u>Lab ID #:</u> AB51171	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	162.4 MPN/100mL	1	SM9223B



**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0149      Sample Date: 6/13/2022      IDEM Sample #: AB51333  
 Water Flow Type: Glide      Water Appearance: Clear      Water Depth:  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed %: 0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	77.5 %		ASTM D888-09(C)
DO	6.67 mg/L		ASTM D888-09(C)
pH (Field)	7.44 SU		EPA 150.2
Specific Conductance (Field)	1621 umho/cm		SM2510B
Temperature	22.5 °C		SM2550B(2)
Turbidity (Hach)	5.51 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 50319032001	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	158 mg/L	2	SM2320B
Chloride	4.9 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	958 mg/L	20	SM2340B
Solids, Suspended Total, (TSS)	3.2 mg/L	2.6	SM2540D
Solids, Total (TS)	1390 mg/L	40	SM2540B
Solids, Total Dissolved (TDS)	1310 mg/L	20	SM2540C
Sulfate	745 mg/L	25	EPA 300.0
Calcium (Total)	201000 ug/L	2000	EPA 200.7
Magnesium (Total)	111000 ug/L	1000	EPA 200.7
COD	10.3 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.17 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	2.8 mg/L	1	SM5310C

Lab ID #: AB51333	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	1299.7 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0149

Sample Date: 7/25/2022

IDEM Sample #: AB52077

Water Flow Type Riffle

Water Appearance Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	83.4 %		ASTM D888-09(C)
DO	6.78 mg/L		ASTM D888-09(C)
pH (Field)	7.73 SU		EPA 150.2
Specific Conductance (Field)	1264 umho/cm		SM2510B
Temperature	25.6 °C		SM2550B(2)
Turbidity (Hach)	19.5 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121001	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	134 mg/L	10	SM2320B
Chloride	5.7 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	610 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	15.2 mg/L	3.1	SM2540D
Solids, Total (TS)	994 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	860 mg/L	20	SM2540C
Sulfate	501 mg/L	25	EPA 300.0
Calcium (Total)	121000 ug/L	1000	EPA 200.7
Magnesium (Total)	74600 ug/L	1000	EPA 200.7
COD	14.1 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.18 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.058 mg/L	0.05	EPA 365.1
TKN	0.71 mg/L	0.5	EPA 351.2
TOC	5.6 mg/L	1	SM5310C

Lab ID #: AB52077	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	> 2419.6 MPN/100mL	2419.6	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	2 - Mod./Light	3 - 46-60
4 - Cloudy		3 - Moderate	4 - 61-75
5 - Mist		4 - Mod./Strong	5 - 76-85
6 - Fog		5 - Strong	6 - > 86
7 - Shower		6 - Gale	

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

**SiteID:** WWL-06-0150      **USGS Hydrologic Unit:** 051202020601  
**Stream Name:** Black Creek      **County:** Greene  
**Description:** CR 50 North      **Latitude:** 39 1 51.37060      **Longitude:** -87 12 46.30295  
**Drainage:** 7.403      **Site Number:** 22T-023

**SiteID:** WWL-06-0150      **Sample Date:** 5/10/2022      **IDEM Sample #:** AB51182  
**Water Flow Type** Glide      **Water Appearance** Clear      **Water Depth**  **Algae?**  
**Water Flow (cf/sec):**  **Flow Estimated?**       **Aquatic Life?**      **Canopy Closed %** 0-20%  
**Sampler Comments:**

<b>Lab ID #:</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
% Sat	92 %		ASTM D888-09(C)
DO	8.5 mg/L		ASTM D888-09(C)
pH (Field)	7.09 SU		EPA 150.2
Specific Conductance (Field)	1293 umho/cm		SM2510B
Temperature	19 °C		SM2550B(2)
Turbidity (Hach)	8.81 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

<b>Lab ID #: 50316481002</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Alkalinity (as CaCO3)	70.3 mg/L	2	SM2320B
Chloride	7 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	739 mg/L	20	SM2340B
Solids, Suspended Total, (TSS)	5.2 mg/L	2.5	SM2540D
Solids, Total (TS)	1090 mg/L	20	SM2540B
Solids, Total Dissolved (TDS)	1050 mg/L	20	SM2540C
Sulfate	684 mg/L	25	EPA 300.0
Calcium (Total)	196000 ug/L	2000	EPA 200.7
Magnesium (Total)	60900 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.21 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.22 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	< 0.5 mg/L	0.5	EPA 351.2
TOC	2.1 mg/L	1	SM5310C

<b>Lab ID #: AB51182</b>	<b>Result</b>	<b>Reporting Limit</b>	<b>Method</b>
Coliforms (Total)	1203.3 MPN/100mL	1	SM9223B
E. coli	18.5 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0150      Sample Date: 6/13/2022      IDEM Sample #: AB51344  
 Water Flow Type: Glide      Water Appearance: Brown      Water Depth:  Algae?  
 Water Flow (cf/sec):  Flow Estimated?       Aquatic Life?      Canopy Closed %: 0-20%  
 Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	84.9 %		ASTM D888-09(C)
DO	7.37 mg/L		ASTM D888-09(C)
pH (Field)	7.22 SU		EPA 150.2
Specific Conductance (Field)	1689 umho/cm		SM2510B
Temperature	22 °C		SM2550B(2)
Turbidity (Hach)	8.99 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #: 50319032002	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	74 mg/L	2	SM2320B
Chloride	7.4 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	948 mg/L	20	SM2340B
Solids, Suspended Total, (TSS)	5.9 mg/L	2.5	SM2540D
Solids, Total (TS)	1390 mg/L	40	SM2540B
Solids, Total Dissolved (TDS)	1390 mg/L	20	SM2540C
Sulfate	940 mg/L	25	EPA 300.0
Calcium (Total)	243000 ug/L	2000	EPA 200.7
Magnesium (Total)	83200 ug/L	1000	EPA 200.7
COD	< 10 mg/L	10	EPA 410.4
Nitrogen, Ammonia	0.34 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.37 mg/L	0.1	EPA 353.2
Phosphorus, Total	< 0.05 mg/L	0.05	EPA 365.1
TKN	0.51 mg/L	0.5	EPA 351.2
TOC	2.2 mg/L	1	SM5310C

Lab ID #: AB51344	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	> 2419.6 MPN/100mL	2419.6	SM9223B

**Indiana Department of Environmental Management  
Office of Water Quality-Watershed Assessment and Planning Branch  
Surface Water Results Summary**

SiteID: WWL-06-0150

Sample Date: 7/25/2022

IDEM Sample #: AB52088

Water Flow Type  Glide

Water Appearance  Brown

Water Depth  Algae?

Water Flow (cf/sec):

Flow Estimated?

Aquatic Life?

Canopy Closed % 0-20%

Sampler Comments:

Lab ID #:	Result	Reporting Limit	Method
% Sat	86 %		ASTM D888-09(C)
DO	7.17 mg/L		ASTM D888-09(C)
pH (Field)	7.66 SU		EPA 150.2
Specific Conductance (Field)	533 umho/cm		SM2510B
Temperature	24.4 °C		SM2550B(2)
Turbidity (Hach)	29 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #: 50322121002	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	65.3 mg/L	10	SM2320B
Chloride	6.9 mg/L	0.25	EPA 300.0
Hardness (as CaCO3)	241 mg/L	10	SM2340B
Solids, Suspended Total, (TSS)	17.8 mg/L	3.1	SM2540D
Solids, Total (TS)	381 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	340 mg/L	10	SM2540C
Sulfate	197 mg/L	2.5	EPA 300.0
Calcium (Total)	64100 ug/L	1000	EPA 200.7
Magnesium (Total)	19600 ug/L	1000	EPA 200.7
COD	19.4 mg/L	10	EPA 410.4
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.24 mg/L	0.1	EPA 353.2
Phosphorus, Total	0.13 mg/L	0.05	EPA 365.1
TKN	0.63 mg/L	0.5	EPA 351.2
TOC	6.6 mg/L	1	SM5310C

Lab ID #: AB52088b	Result	Reporting Limit	Method
Coliforms (Total)	54750 MPN/100mL	100	SM9223B
E. coli	3880 MPN/100mL	100	SM9223B

Weather Code Definitions			
SC Sky Conditions	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	0 - North (0 Degrees)	0 - < 32
2 - Scattered	9 - Snow	1 - East (90 Degrees)	1 - 33-45
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27 - West (270 Degrees)	3 - 46-60
5 - Mist			4 - Moderate
6 - Fog			5 - Mod./Strong
7 - Shower			6 - 76-85
			6 - > 86
			6 - Gale